UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,926	09/04/2003	Naoki Hashimoto	Q77274	3647
23373 SUGHRUE MI	7590 01/13/200 <b>ON. PLLC</b>	EXAMINER		
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			ZEWDU, MELESS NMN	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			01/13/2009	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/653,926	HASHIMOTO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Meless N. Zewdu	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>31 Oc</u>	etoher 2008					
·=	<i>,</i> —					
· · · · · · · · · · · · · · · · · · ·						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-8,18 and 26-40</u> is/are pending in the	4)⊠ Claim(s) <u>1-8,18 and 26-40</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>18</u> is/are allowed.						
6)⊠ Claim(s) <u>1,2,26,27,32,39 and 40</u> is/are rejected.						
7) Claim(s) <u>3-8, 28-31 and 33-38</u> is/are objected t	· · · · · · · · · · · · · · · · · · ·					
, <u> </u>	· _ · · · · · · · · · · · · · · · · · ·					
O) Ciaim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>31 October 2008</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P	atent Application				
Paper No(s)/Mail Date 6) L Other:						

Application/Control Number: 10/653,926 Page 2

Art Unit: 2617

#### **DETAILED ACTION**

#### Response to Remarks

- 1. This action is in response to the communication filed on 10/31/08.
- 2. Claims 9-17 and 19-25 were previously cancelled.
- 3. Claims 1-8, 18, and 26-40 are pending in this action.
- 4. This action is final.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26, 27, 32 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over See (US 2004/0003094 A1 in view of Kikinis (US 6,078,566). For examination purpose, the claims are considered in the order shown below beginning with claim 39.

As per claim 39: See discloses a packet transmission method comprising the steps of: sorting received packets into prioritized packets (see paragraph 0054); accumulating the sorted prioritized packets (see paragraph 0043); capsulating/encapsulating more than one of the accumulated packets into one capsulated packet (see paragraphs 0002, 0013, 0029, particularly 0002); and

Art Unit: 2617

transmitting said capsulated packet (see paragraphs 0013, 0029). Thus, the immediate reference discloses packets that are prioritized (sorted according to priority levels); stored and encapsulated before being sent/transmitted or distributed to a target network device. But, it (See) does not explicitly teach about sorting packets into prioritized and non-prioritized packets, as claimed. However, in the same field of endeavor, Kikinis teaches wireless data network telephony wherein a DSP (digital signal processor) within a speech recognition is used to sort out speech from non-speech and creates data packets for voice only (see col. 7, lines 24-45). It is to be noted that since the network is a data network, the other or the unselected packet/s must be data packet/s from which the voice only signal is extracted and packetized. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of See with that of Kikinis for the advantage of providing enhanced data network telephony (internet telephony) in narrow bandwidth wireless links (see col. 1, lines 6-12).

As per claim 32: the features of claim 32 are similar to the features of claim 39 except claim 39 is directed to method comprising steps required to be employed by the system of claim 32. Hence, since the system of claim 32 is required by the method of claim 39, claim 32 is rejected on the same ground and motivation as claim 39.

As per claim 26: "A base station" in the preamble is considered as an intended use since it does not enhance the body of the claim. Other features of claim 26 are similar to the features of claim 39, except claim 39 is directed to a method comprising steps required to be employed by the system of claim 26. Hence, since the system of claim 27 is required by the method of claim 39, claim 27 is rejected on the same ground and motivation as claim 39.

As per claim 27: "A wireless LAN terminal" in the preamble is considered as an intended use since it does not enhance the body of the claim. Other features of claim 27 are similar to the features of claim 39, except claim 39 is directed to a method comprising steps required to be employed by the system of claim 27. Hence, since the system of claim 27 is required by the method of claim 39, claim 27 is rejected on the same ground and motivation as claim 39.

Claims 1 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over See in view of Kikinis and further in view of applicants' admitted prior art (AAPA).

As per claim 1: some of the features of claim 1 (directed to sorting, accumulating, capsulating/encapsulating and transmitting) are similar to the features of claim 39. Since the wireless system of claim 1 requires to follow the method steps of claim 39, the similar features of claim 1 are rejected on the same ground and motivation as claim 39. But, See in view of Kikinis does not explicitly teach about at least one base station; at least one wireless LAN terminal connected to said base station via a wireless LAN; and a packet transmission system for transmitting a packet between said base station and said at least one wireless LAN terminal via the wireless LAN, as claimed by applicant. However, in the same field of endeavor applicant admits the presence of a prior art that includes --- at least one base station (see fig. 14, element 1320); at least one wireless LAN terminal connected to said base station via a wireless LAN (see fig. 14, elements 1331-133N); and a packet transmission system for transmitting a packet between said base station and said at least one wireless LAN terminal via the wireless LAN (see fig. 14, elements PAYLOAD 1-PAYLOAD N). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to utilize a wireless LAN system for transmitting voice packets (or voice/data), since it is known to do so as evidenced by applicants' use of the same.

As per claim 40: the features of claim 40 are similar to the features of claim 1. Hence, claim 40 is rejected on the same ground and motivation as claim 1.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied to claim 1 above and further in view of examiner's Official Notice.

As per claim 2: the references applied to claim 1 do not explicitly teach about a packet transmission system further comprising arbitrating means for transmitting delay request (back-off request) information for delaying transmission of packets from said base station to said wireless LAN terminal such that the packet transmission does not overlap

(collide) with other terminals, thereby arbitrating transmission of packets from said wireless LAN terminal to said base station so as not to cause a collision thereof, as claimed by applicant. However, examiner takes Official Notice that it is well known in the art of multiple access communication to arbitrate access between multiple devices or nodes or hosts trying to get access to a channel or a network such that the packets from those devices do not collide each other by arriving at the same time to their destination or a network access point like a base station, as for example shown in Sugar et al.'s reference (see col. 10, lines 40-61). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make use of an arbitrating means (e.g., CSMA/CA or carrier sense multiple access with collision avoidance) for the known advantage of avoiding packet collisions, As evidenced by applicant's use of the same.

### Allowable Subject Matter

Claim 18 is allowed.

As per claim 18: the claim is directed to packet transmission. The prior art of record, within the context of claim 18, does not fairly teach or suggest a packet transmission system with a means for transmits capsulated packets with a defined CODEC period, which is a minimum period necessary for a terminal reception, as recited in claim 18.

Claims 3-8, 28-31 and 33-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

Applicant's arguments filed 10/31/08 have been fully considered but they are not persuasive. Hereunder are presented applicant's arguments and corresponding examiner's responses.

**Argument I:** with regard to claim 39, applicant argues by saying See does not disclose or suggest "capsulating more than one of the accumulated packets into one capsulated packet". Applicant furthers the argument by stating, contrary to examiner's assertion, See fails to disclose or suggest encapsulating more than one packet together. Rather, See discloses that each individual packet is encapsulated. Kikinis does not remedy this deficiency.

**Response I:** examiner respectfully disagrees with the argument. In that, first the feature in question is taught by See, but not by Kikinis. To that effect See discloses "a method and system for conveying, selecting, and encapsulating packets at the first device such that the packets may be regenerated at a second device with little or no modification to the information contained therein" (see paragraph 0002).

**Argument II:** with regard to claim 39, applicant argues by saying Kikinis does not teach or suggest "sorting received packets into prioritized packets and packets other than the prioritized packets", as suggested by examiner.

**Response II:** examiner respectfully disagrees with the argument. In that Kikinis teaches a "DSP 101a with speech recognition capability monitors input, sorts out

speech (priority) from non-speech (other than non-priority) and creates data packets for voice only (see col. 7, lines 32-36). Therefore, the argument is not persuasive.

**Argument III:** with regard to claim 39: applicant asserts, the sorting of speech from non-speech (in Kikinis), which examiner asserts corresponds to the sorting recited in claim 39, happens before packets are created. Contrary to examiner's interpretation, "prioritized packets" cannot be sorted from "other than prioritized packets" under the examiner's interpretation of Kikinis...

Response III: examiner respectfully disagrees with the argument. First, examiner agrees with applicant's assertion that -- "prioritized packets" cannot be sorted from "other than prioritized packets" in Kikinis. However, while the instant claim (claim 39) calls for sorting packets, Kikinis teaches sorting the data before packetizing, which is saving time and thus more efficient technique. Moreover, the difference in sorting before and/or after packetizing data does not carry patentable weight since the end result is the same, sorte packet. Hence, examiner does not find the argument convincing.

**Argument IIV:** with regard to claim 2, applicant states, "applicant does not acquiesce to the examiner's Official Notice, and requests evidence that the relevant feature was known in the art at the time of the invention.

**Response IV:** with regard to the above request, examiner provides the following material/reference as evidence that the feature of claim 2 is a well known technique of controlling collision at the time the invention.

(1) (6,078,566) issued to Kikinis teaches about CSMA/CD for avoiding collision in a network including wireless LAN (see col. 12, lines 1-61).

Art Unit: 2617

(2) 7,050,452 B2) issued to sugar et al., teaches about system and method for interference mitigation among multiple WLAN protocols (see title; abstract; col. 7, lines 66-col. 8, line 22, lines 52-66; col. 9, lines 11-67; col. 10, lines 40-53; col. 18, lines 24-55; claim 78).

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bost Dwayne D can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/653,926 Page 9

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

/Meless N Zewdu/

Primary Examiner, Art Unit 2617

1/13/2009